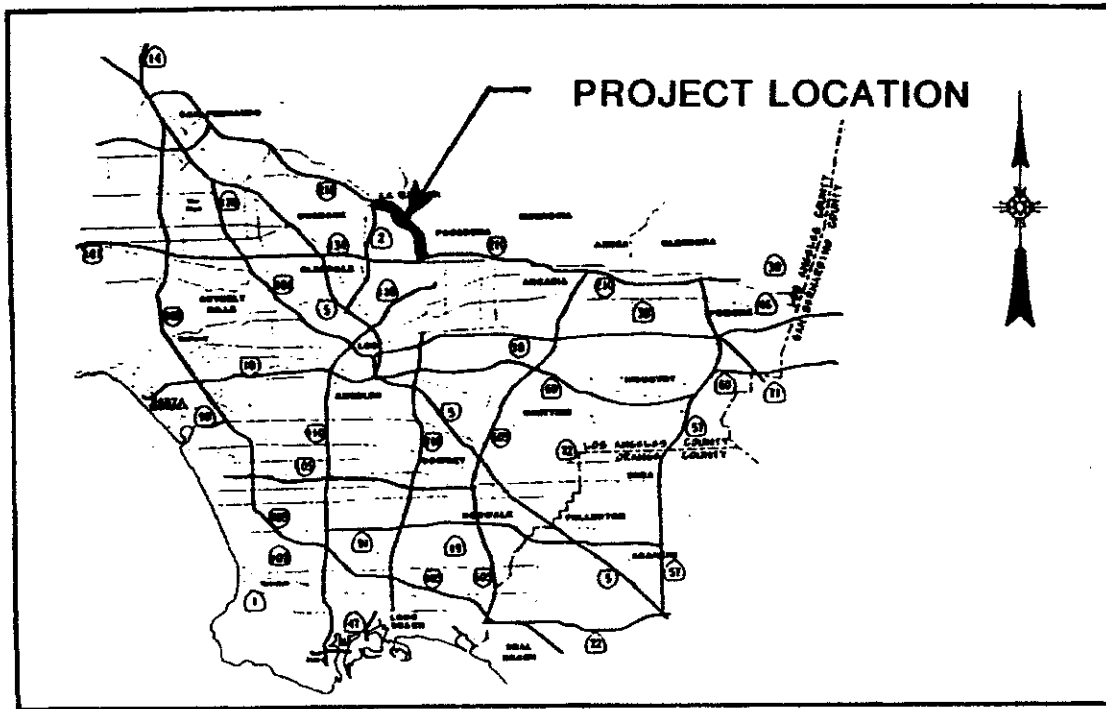


**SUPPLEMENTAL PROJECT REPORT**




Route 2 to Route 134

I have reviewed the right of way information contained in this Project Report and the R/W Data Sheet attached hereto, and find the data to be complete, current, and accurate.

APPROVAL RECOMMENDED:

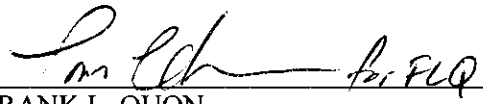
  
LAWRENCE STALEY, Chief  
Office of R/W Project Delivery Manager

CONCURRED:

  
DAREK CHMIELEWSKI, Project Manager  
Office of Project Management-South

APPROVED:

6/26/01  
Date

  
FRANK L. QUON  
District Division Chief  
Division of Operations-District 7

  
ROBERT W. SASSAMAN  
District Director-District 7

7-LA-210 KP 30.3/40.2 (PM 18.8/24.9)  
7-388-129971  
HB4N

## REGISTERED ENGINEER'S CERTIFICATIONS

This Project Report has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained therein and the engineering data upon which recommendations, conclusions, and decisions are based.

Edward Krause  
REGISTERED CIVIL ENGINEER

Jan 25, 2000  
Date

This authorization is for the following project:

7-LA-210 KP 30.3/40.2  
7-389  
129971



## **I INTRODUCTION**

It is proposed to upgrade the existing Caltrans District 7 Traffic Congestion Relief Management System (TCRMS)<sup>1</sup> along Interstate Route 210 from State Route 2 to State Route 134. Proposed components of the TCRMS are a fiber optic communication trunkline, closed circuit television (CCTV), ramp metering systems (RMS), and traffic monitoring station (TMS), and will include connections of existing TCRMS elements to the new trunkline. Additional capacity and points of connection are proposed for Traffic Operation Congestion Relief Management Support Facilities (TCRMSF), including traffic signal master controllers, irrigation controllers, a census station, and a proposed fiber optic communications system to be installed along State Route 2 and Route 210 north of Route 2. The estimated construction cost is \$5,400,000. This project is proposed to be funded from the SHOPP Contingency program in the 2001-2002 fiscal year. This project has been assigned the Project Development Processing Category 5 because it has minimal economic, social, and environmental impacts.

## **II RECOMMENDATION**

Approval is requested to upgrade and complete a TCRMS along the Route 210 (Foothill Freeway) from the Route 2 Interchange to the Route 134/710 Interchange.

## **III BACKGROUND**

### **A. Project History**

The Route 210 Interstate Route (The Foothill Freeway) is an important component in the regional access system serving commuter, commercial, and shipping needs in Pasadena and other communities in the Foothill District. This project proposes to enhance the reliability functionality of this system by replacing the existing leased communication system with a fiber optic communications system and modifying, enhancing, and completing the existing TCRMS field elements.

The installation of a TCRMS along Route 210 east of Route 710 and along Route 134 west of Route 710 is completed. The installation of a TCRMS along Route 2 is scheduled for construction in October 2001.

### **B. Existing Facilities**

Route 210 (Foothill Freeway) varies from a six to ten lane facilities travelling along the foothills of the San Bernardino Mountains. There are many communities located along this 79.0 kilometer corridor resulting in heavy commuter traffic as motorists travel to

<sup>1</sup>TCRMS has previously been identified as Traffic Operations System (TOS)

various employment destinations throughout Los Angeles County. Portions of the corridor, north of the Pasadena area, experience congestion southbound in the AM peak period and northbound in the PM peak period.

The current TCRMS elements on the project route consists of RMS, TMS, and a changeable message sign (CMS). Existing communication between these elements and the Traffic Management Center (TMC) is via leased full duplex data telecommunications lines.

#### **IV NEED AND PURPOSE**

##### **A. Problem, Deficiencies, Justification**

The current TCRMS consists primarily of a dedicated, leased telephone line communication network and traffic management field elements. The TCRMS has evolved on the three routes over the past 15 years in an incremental fashion. Ramp meter subsystems, mainline detection subsystems, and motorists information subsystems have been added to the three routes according to funding availability, schedule, technology, and traffic demand criteria. Communication links between the TCRMS field elements and the TMC has also largely evolved on an incremental basis in coordination with the implementation of the TCRMS field elements. Several key factors have emerged over the past few years which highlight the deficiencies associated with the current TCRMS. Greater emphasis is being placed upon managing freeway operations, given increasing traffic demand and dwindling resources for adding physical capacity to the freeway network. Advancing technology also provides greater opportunities to manage freeway operations, but requires more communication capability than currently available with the existing communication subsystem. In recognition of this situation, this project will expand and enhance the TMC and the TCRMS, thereby improving freeway management capabilities on Route 210.

##### **1. Ramp Metering System (RMS)**

The system is partially complete; RMS's are proposed in this project.

##### **2. Traffic Monitoring Stations (TMS)**

TMS have been installed along the mainline as part of RMS. Stand-alone stations situated between RMS stations are lacking. The ability of the TCRMS to recognize an incident is weakened at these locations. Typically, the distance separating TMS varies from 0.5 mile to 1 mile.

### 3. Closed Circuit Television (CCTV)

The TMS associated with ramp meter stations can detect fluctuations in mainline traffic flow, which often can be a result, or an indication of, an incident. The only accurate method of determining the exact nature and extent of a detected incident is by visual verification.

While TMS improves the ability of the TMC personnel to remotely detect an incident, it does not provide the ability to confirm the presence and extent of an incident. The existing TCRMS does not have the means to confirm or classify an incident detected by the TMS except by field verification. Knowledge of the extent and nature of an incident is required before corrective action can be employed.

There are no CCTV sites now existing throughout the project limits of this route. The cameras are needed to provide traffic flow verification and confirmation of message on a CMS. Incidents occurring on the route cannot be visually confirmed.

### 4. Communication System

The existing telecommunication system is not suitable for the transmission of full motion video that is produced by the cameras proposed for the TCRMS. Also, the data communications are now at 1200 baud, but will shortly be raised to 9600 baud, especially for data collection or acquisition points of the Supervisory Control and Data Acquisition (SCADA) system. The existing telecommunications system does not have the required speed or bandwidth without using very sophisticated and complex compression and coding hardware.

#### B. Traffic

Typical existing (1998) Average Daily Traffic (ADT) and (2020) projected (ADT) on Route 210 where TMS elements and communication systems are to be installed are as follows:

Location	ADT	
	1998	2020
Angeles Crest Highway	105,000	220,500
Mountain Avenue	115,000	220,800

Source: Office of Planning and Public Transportation

## V ALTERNATIVES

### A. Proposed Project

The project consists of installing a new fiber optic/twisted pair cable communications system for data and video communications along Route 210 Freeway. The new system will replace the existing leased line telecommunications system and will greatly improve the reliability, availability and performance of the traffic operations system. Total construction cost estimate for the proposed project is \$5,400,000. Following is a summary of the proposed project components:

- **Communication System**

The communication system consists of a backbone system using single mode fiber optic cable and established communication design criteria consistent with the system-wide design parameters to insure compatibility and cost effectiveness.

Twisted pair cable will connect to all existing and proposed elements to transmit data. Single mode fiber optic distribution cable will connect to camera sites to transmit video. The system will have capacity to allow for expansion and enhancement in the future. Two 102 mm conduits are proposed to be installed along the outside shoulder of the freeway. Safe and efficient access for Electrical Maintenance crews will be included in the design process.

- **CCTV Cameras**

CCTV was selected as a means to confirm and identify traffic congestion detected by a TMS. CCTV locations were determined through incident analysis, review of the horizontal and vertical topography, turnout considerations, and a review of potential sites. There are 3 locations proposed.

- **Ramp Metering System**

The existing four RMS within the project limits will be connected to the proposed communication system. All existing loop detector assemblies will be upgraded to current standards. Eight new locations are proposed in this project and will complete the RMS system for this route.

- **Traffic Monitoring Stations**

The TMS (stand-alone) system will be installed in this project and will be connected to the proposed communications system. Three existing stations will be connected to the proposed communications system. Loop detectors will be upgraded to current standards.

- **Changeable Message Sign**

One existing CMS, which currently utilizes a phone line will be connected to the proposed communications system. One CMS is proposed in this project.

- **Video and Data Nodes**

One video and one data node equipment will be installed in this project.

- **Railroad/Utility Involvement**

There are no railroads involved in this project.

- **Highway Planting and Irrigation System**

The existing system is complete and the controllers will be connected to the proposed communications system. Where planting is disturbed during construction, the site will be restored to its original condition.

The selected alternative of twisted pair cable and single mode fiber optic cable is the preferred communication distribution system. The SYSTEM WIDE DESIGN report was followed to provide details for implementation of the communications system.

**B. Rejected Alternatives**

The "no-build" alternative was considered in developing and analyzing system alternatives, but was eliminated due to the existing operational problems being experienced on the project area freeway and the ability to accommodate traffic management activities without the proposed TCRMS elements. The current system of dedicated, leased telephone lines result in high initial capital cost and continuing maintenance problems for the State. Leased telephone lines do not have the capacity for transmission of real-time video, but only for compressed digital images at considerable expense to the State. The alternative methods of wireless transmission would have limited bandwidth, lack of ability to retransmit data, poor resolution quality, and difficulty in obtaining a license.

The "no-build" alternative would leave "visual holes" in the existing CCTV system, RMS, and TMS, and would leave a missing communications link in the fiber optic communications network defeating the objectives of the TCRMS.

The alternative of installing conduit along the right-of-way line was rejected because of the inaccessibility of maintenance equipment to splice vaults. Fiber splicing must be done in maintenance vehicles, which provide a clean enclosed environment. Also,

this alternative was rejected because of the excavation of large quantities of lead contaminated soils, more disruption of landscaping during construction, difficulty in connecting to TCRMS elements, and problems encountered jacking under local streets at undercrossings and overcrossings.

## **VI OTHER CONSIDERATIONS**

### **A. Hazardous Waste**

A preliminary study was conducted. The potential for lead appears to exist along the unpaved shoulders. A site investigation will be performed during the PS&E stage of this project. The Site Investigation Report will indicate if special provisions are required for handling and disposal/reuse of soil.

### **B. Value Analysis**

In an effort to provide a cost effective project, several proposed communication options were analyzed, along with the design criteria, to assure the most efficient configurations were used. A Value Analysis Study dated December 28, 1998 was completed. A decision has been made to use single mode fiber optic cable as the backbone of the system. Twisted pair cable will connect to all existing and proposed TCRMS data elements.

### **C. Resource Conservation**

This project will greatly improve the reliability and efficiency of the current traffic surveillance system along these freeways. The new communication system will enable operators in the TMC to detect, verify, and manage incidents more efficiently. Overall traffic congestion and delay will be reduced, resulting in less fuel consumption. Accordingly, this project will contribute to the conservation of energy and nonrenewable resources.

During the construction phase existing CMS will be utilized along with signing developed in the Traffic Management Plan to move traffic efficiently through construction zones.

### **D. Right-of-Way Issues**

All of the proposed work is within the existing right-of-way. No additional right-of-way is required. Construction of the proposed TCRMS elements can be performed within the existing right-of-way and without impacting the current road geometry.

E. Environmental Issues

The project is categorically exempt Class 1, section 1510.1c of Caltrans Environmental Regulations (see Attachments for the Categorical Exemption Sheet).

F. Air Quality Conformity

The proposed project is identified as a Traffic Management System (TMS) project and as such is consistent with the Regional Mobility Plan. At the project level, it will have a positive impact on reducing emissions and improving air quality due to reduction of overall traffic congestion and delay.

G. Title VI - Considerations

This project will not affect low mobility and minority groups. All work with the exception of pulling new wire in existing power cabinets and jacking conduit under public streets will be within the freeway right-of-way. When working in existing power cabinets on public property, every effort will be made to protect access of low mobility groups. Permits to Enter and Construct will be secured from the local jurisdictions for work done on public property. Permit to Enter and Construct shall also be obtained prior to construction.

H. Maintenance Considerations

Equipment installed by this project will require highly specialized maintenance personnel. Maintenance problems with leased telecommunication lines will be reduced or eliminated. Consideration of CCTV and CMS sites was based in part on the ability to provide adequate turnout or refuge areas for maintenance vehicles to facilitate safe and convenient access. These pullout areas are also available for use by the California Highway Patrol, emergency vehicles, and the public in general.

Camera poles within 9 m of traffic will use appropriate protective measures, and lane closures will be required for access to maintain field equipment where turnouts are not provided.

I. Highway Planting and Irrigation System

Impact to existing highway planting will be minimal. Where planting is disturbed during construction, the site will be restored to its original condition.

Pruning/removing of trees may be necessary to maximize camera coverage. Where trees are removed, replacement trees will be planted. All planting disruption and surface restoration activities will be coordinated with District 7 Landscape Architecture staff.

## **VII OTHER CONSIDERATIONS AS APPROPRIATE**

### **A. Traffic Management Plans**

The hours available for contractor's operations will be regulated to off-peak hours and detailed within the special provisions to minimize the impact on existing traffic flows. Special Provisions will regulate the contractor's operations in the event that ramp or lane closures are required and the travelling public will be informed of the time and location where such construction will take place.

### **B. Future Design Considerations**

The proposed communication system will provide a high degree of expandability. Additional CCTV sites and other TCRMS elements can be easily added at any location within the project limits. The fiber optic and twisted pair cables will have ample spare capacity to accommodate future TCRMS elements along Route 210, and a future communications system along Angeles Crest Highway.

## **VIII PROGRAMMING**

The project will be funded from the SHOPP Contingency and programmed in the fiscal year 2001-2002. It is part of District 7 Master Plan and the type of work is consistent with the HB4N Program. The milestone schedule this project includes a begin design date of October 2000, a PS&E date of January 2002, an RTL date of March 2002, a contract award date of July 2002, and a project completion date of August 2004.

## **IX REVIEWS**

### **A. FHWA Transportation Engineer**

ROBERT CADY

Date reviewed: September 14, 2000

### **B. HQ Traffic Reviewer**

JERRY CHAMPA

Date reviewed: March 2, 2001

### **C. HQ Geometric Reviewer**

JD BAMFIELD

Date reviewed: January 25, 2001

## **X PROJECT PERSONNEL**

EDWARD KRAUSE, Project Engineer (Project Delivery) Office of ITS Development	CALNET 647-0270
JACQUELINE C. TAN, Senior Design Engineer Office of ITS Development	CALNET 647-4698
DAREK CHMIELEWSKI, Project Manager Office of Project Management-South	CALNET 647-8485
PATRICIA P. PEROVICH, Chief Office of ITS Development	CALNET 647-0334
JAY SHAH SHOPP Program Manager	CALNET 647-7985
GARY M. IVERSON, Senior Planner Office of Environmental Planning	CALNET 647-3818
JORGE G. CABRERA, Reviewer Office of R/W Planning & Management	CALNET 647-4800

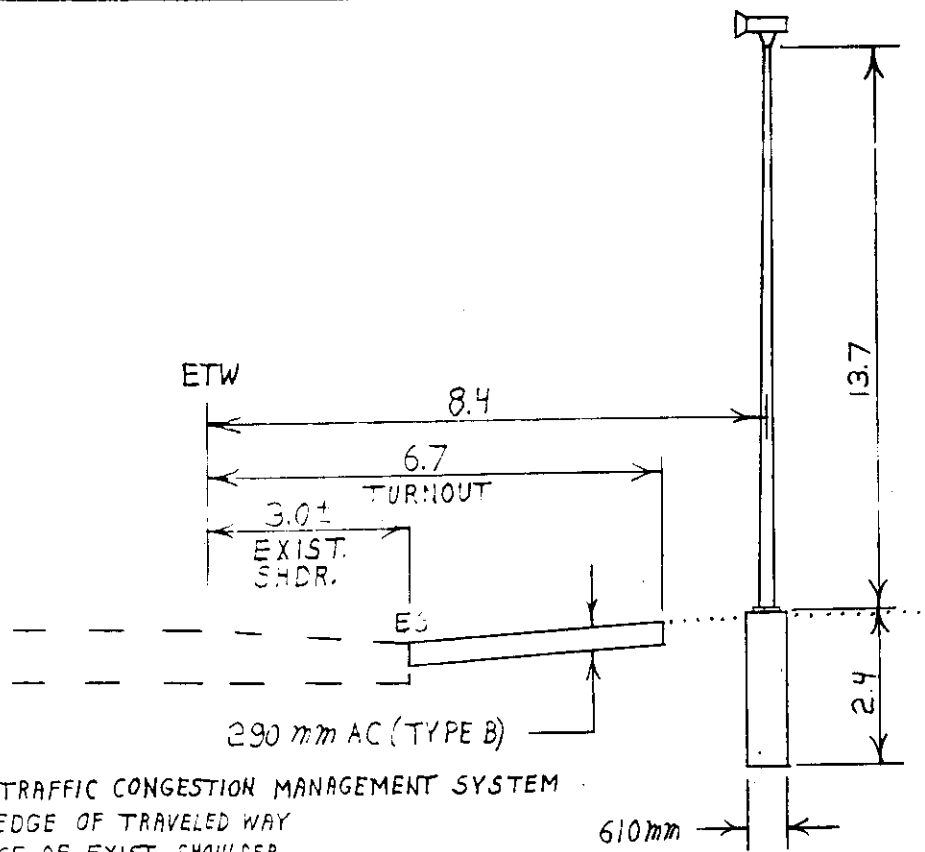
## **XI ATTACHMENTS**

- Location Map/Existing and Proposed Facilities
- TCRMS Elements Cross-Sections
- Cost Estimate
- Categorical Exemption
- R/W Data Sheet
- Hazardous Waste Investigations
- Cover Page of Original Project Report

Filename: SPR-LA210 KP30 3-40 2



# TCRMS ELEMENTS CROSS SECTIONS



TCRMS: TRAFFIC CONGESTION MANAGEMENT SYSTEM

ETW: EDGE OF TRAVELED WAY

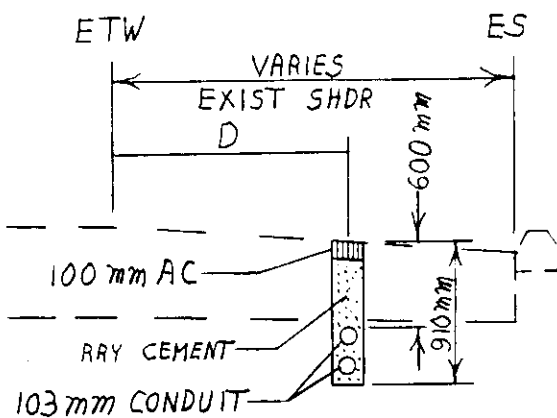
ES: EDGE OF EXIST. SHOULDER

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

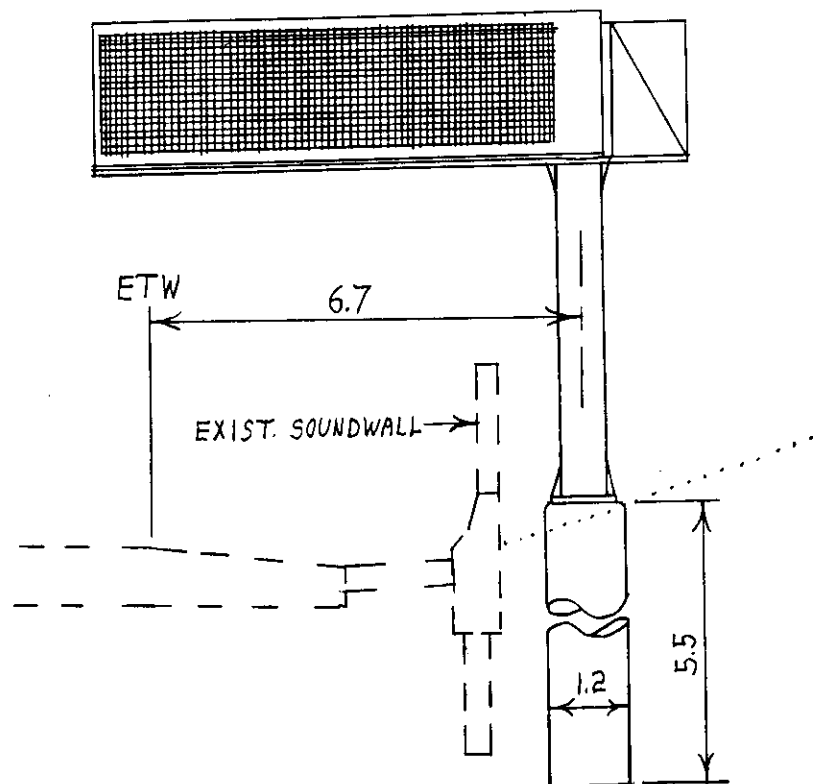
## CLOSED CIRCUIT TELEVISION LOCATION

## COMMUNICATIONS CONDUIT INSTALLATION

D: 1.8 FOR A 3.0 WIDE SHOULDER  
1.3 FOR A 2.4 WIDE SHOULDER



## CHANGEABLE MESSAGE SIGN



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## PROJECT REPORT COST ESTIMATE SUMMARY

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07-LA-210  
KP 30.3/40.2 (PM 18.8/24.9)  
EA 129971  
From Route 134 to Route 2

### Project Description:

**Limits** From Route 134 to Route 2 and ELA, SGV,  
NWK, LAX, NHD Communication HUBs and TMC  
**EA/Program** 129971

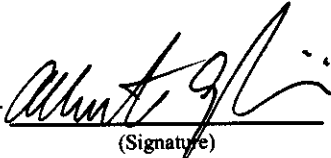
**Proposed** Install Communication System  
**Improvement (Scope)** \_\_\_\_\_

**Phase** \_\_\_\_\_  
\_\_\_\_\_

### SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	<u>\$5,059,000</u>
TOTAL STRUCTURE ITEMS	<u>\$350,000</u>
SUBTOTAL CONSTRUCTION COSTS	<u>\$5,409,000</u>
TOTAL RIGHT OF WAY ITEMS (Cert. Date 10/01/01)	<u>\$21,000</u>
TOTAL PROJECT CAPITAL OUTLAY COSTS	<u>\$5,400,000</u>

Reviewed by District Program Manager

  
(Signature)

Date

6/25/01

Approved by Project Manager

  
(Signature)

Date

06/25/01

Phone No. (213) 897-8485

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07-LA-210  
KP 30.3/40.2 (PM 18.8/24.9)  
EA 129971  
From Route 134 to Route 2

I. ROADWAY ITEMS

<u>Section 1 Earthwork</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Maintenence Turnout (1)	5	EA	\$25,000	\$125,000	
Clearing & Grubbing	LS	LS	\$20,000	\$20,000	
Subtotal Earthwork					<u>\$145,000</u>

Section 2 Pavement Structural Section

Subtotal Pavement Structural Section \$0

Section 3 Drainage

Subtotal Drainage \$0

(1) MAINTENACE TURNOUT AREA INCLUDES MBGR, RETAINING WALL AND DIKE

07-LA-210  
 KP 30.3/40.2 (PM 18.8/24.9)  
 EA 129971  
 From Route 134 to Route 2

<u>Section 4 Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Item Cost</u>	<u>Section Cost</u>
Irrigation Modification	1	LS	\$20,000	\$20,000	
Water Pollution Control	1	LS	\$100,000	\$100,000	
Hazardous Waste Mitigation	1	LS	\$400,000	\$400,000	
(Aerially Deposited Lead Soil)					
Resident Engineer Office	1	LS	\$100,000	\$100,000	
			Subtotal Specialty Items		<u>\$620,000</u>
<u>Section 5 Traffic Items</u>					
Communication Conduit <sup>(2)</sup>	9,800	M	\$160	\$1,568,000	
CCTV Camera	3	EA	\$45,000	\$135,000	
TMS/RMS	11	EA	\$38,000	\$418,000	
CMS	1	EA	\$200,000	\$200,000	
Video Node	1	EA	\$60,000	\$60,000	
Data Node	1	EA	\$55,000	\$55,000	
System Testing & Documentation	1	LS	\$50,000	\$50,000	
Traffic Management Plan	1	LS	\$30,000	\$30,000	
Traffic Control Systems	1	LS	\$200,000	\$200,000	
Grade TMS/RMS <sup>(1)</sup>	9	EA	\$25,000	\$225,000	
			Subtotal Traffic Items		<u>\$2,941,000</u>
TOTAL SECTIONS 1 thru 5					<u>\$3,706,000</u>

(1) UPGRADE EXISTING LOOPS TO CURRENT STANDARDS

(2) ESTIMATE INCLUDES CONDUITS, CABLES,  
 PULL BOXES, SPLICE CLOSURES, INNERDUCTS  
 TRAINING AND EQUIPMENT AT HUB

07-LA-210  
KP 30.3/40.2 (PM 18.8/24.9)  
EA 129971  
From Route 134 to Route 2

### **Section 6 Minor Items**

<u>Section 6 Minor Items</u>				<u>Item Cost</u>
Subtotal Sections 1 thru 5	\$3,706,000	x (5%)	=	<u>\$185,300</u>

<b>TOTAL MINOR ITEMS</b>	<b>\$185,300</b>
--------------------------	------------------

## **Section 7 Roadway Mobilization**

Subtotal Sections 1 thru 5	\$3,706,000		
Minor Items	\$185,300		
Sum	\$3,891,300	x (10%)	= \$389,130

TOTAL ROADWAY MOBILIZATION	\$389,130
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## **Section 8 Roadway Additions**

## Supplemental Work

Subtotal Sections 1 thru 5	\$3,706,000		
Minor Items	\$185,300		
Sum	\$3,891,300	x (5%)	= \$194,565

## Contingencies

Subtotal Sections 1 thru 5	<u>\$3,706,000</u>		
Minor Items	<u>\$185,300</u>		
Sum	<u>\$3,891,300</u>	x (15%)	= <u>\$583,695</u>

TOTAL ROADWAY ADDITIONS	<u>\$778,260</u>
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<b>TOTAL ROADWAY ITEMS</b>	<b>\$5,059,000</b>
(Subtotal Sections 1 thru 8)	

Estimate Prepared By Edward Krause Phone # (213) 897-0270 DATE 6-Jun-01  
(Print Name)

Estimate Checked By Jacqueline Tan Phone # (213) 897-4698 DATE 6-Jun-01  
(Print Name)

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07-LA-210  
KP 30.3/40.2 (PM 18.8/24.9)  
EA 129971  
From Route 134 to Route 2

**II-STRUCTURES ITEMS**

STRUCTURE

Conduit Installation on Structure \$350,000

**SUBTOTAL STRUCTURES ITEMS** \$350,000

Railroad Related Costs      N/A      N/A      N/A

**TOTAL STRUCTURES ITEMS** \$350,000

**USE** \$350,000

COMMENTS :

Estimate Prepared By Edward Krause  
(Print Name)

Phone # (213) 897-0270



**CATEGORICAL EXEMPTION  
CATEGORICAL EXCLUSION/PROGRAMMATIC CATEGORICAL EXCLUSION  
DETERMINATION FORM**

07-LA-210  
Dist.-Co.-Rte. (or Local Agency)

KP 30.3/40.2  
K.P./K.P.(P.M./P.M.)

12971  
E.A. (State project)

20010017  
Proj. No. (Local project)  
(Fed.Prog. Prefix Proj. No.,  
Agr. No.)

**PROJECT DESCRIPTION:** (Briefly describe project, purpose, location, limits, right-of-way requirements, and activities involved.)

Upgrading the Traffic Operations System (TOS) along I-210 from SR 2 to SR 134 by installing fiber optic trunklines, closed circuit television cameras, ramp metering systems, traffic monitoring stations, and a changeable message sign. See the attached memo that details the environmental requirements for this project.

**CEQA COMPLIANCE** (for State Projects only)

**CATEGORICAL EXEMPTION** (See 14 CCR 15300 et seq.)

- If this project falls within exempt class 3, 4, 5, 6 or 11, it does not impact an environmental resource of hazardous or critical concern where designated, precisely mapped and officially adopted pursuant to law.
- There will not be a significant cumulative effect by this project and successive projects of the same type in the same place, over time.
- There is not a reasonable possibility that the project will have a significant effect on the environment due to unusual circumstances.
- This project does not damage a scenic resource within an officially designated state scenic highway.
- This project is not located on a site included on any list compiled pursuant to Govt. Code § 65962.5 ("Cortese List").
- This project does not cause a substantial adverse change in the significance of a historical resource.

**CALTRANS CEQA DETERMINATION**

☐ Exempt by Statute (PRC 21080)

Based on an examination of this proposal, supporting information, and the above statements, the project is:

☒ **Categorically Exempt**. Class [1, C, or ☐ **General Rule exemption** (This project does not fall within an exempt class, but it can be seen with certainty that there is no possibility that the activity may have a significant effect on the environment [CCR 15061(b)(3)])

  
Signature: Senior Environmental Planner

10-24-00  
Date

  
Signature: Project Manager

10-24-00  
Date

**NEPA COMPLIANCE** (23 CFR 771.117)

**CATEGORICAL EXCLUSION**

- This project does not have a significant impact on the environment as defined by the NEPA.
- This project does not involve substantial controversy on environmental grounds.
- This project does not involve significant impacts on properties protected by Section 4(f) of the DOT Act or Section 106 of the National Historic Preservation Act.
- In nonattainment or maintenance areas for Federal air quality standards: this project comes from a currently conforming plan and Transportation Improvement Program or is exempt from regional conformity.
- This project is consistent with all Federal, State, & local laws, requirements or administrative determinations relating to the environmental aspects of this action.

**PROGRAMMATIC CATEGORICAL EXCLUSION**

☒ Based on the evaluation of this project and supporting documentation in the project files, all the conditions of the September 7, 1990 Programmatic Categorical Exclusion have been met.

**CALTRANS NEPA DETERMINATION**

Based on an examination of this proposal, supporting information, and the above statements, it is determined that the project is a:

☐ **Categorical Exclusion**

☐ **Programmatic Categorical Exclusion**

  
Signature: Senior Environmental Planner  
(for all State & Local CEs)

10-24-00  
Date

  
Signature: Project Manager  
(PM: for all State CEs / DLAE: for Local Asst.PCEs)

10-24-00  
Date

**FHWA DETERMINATION** (if applicable)

Based on the evaluation of this project and the statements above, it is determined that the project meets the criteria of and is properly classified as a Categorical Exclusion.

Signature: FHWA Transportation Engineer

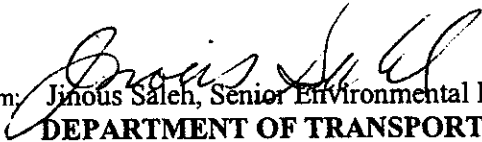
Date

- ☐ Additional information attached or referenced, as appropriate (e.g. Mitigation commitments for NEPA only ; Air Quality studies and documentation of exemption from regional conformity or use of CO Protocol; §106 commitments; §4(f) or Programmatic §4(f); date of COE nationwide permit; § 7 species survey results; Wetlands Finding; Floodplain Finding; additional studies; design conditions. Rev. 8/2000

## Memorandum

To: Ed Krause, ITS Development  
**DEPARTMENT OF TRANSPORTATION**

Date: October 23, 2000

From:   
Jinous Saleh, Senior Environmental Planner  
**DEPARTMENT OF TRANSPORTATION**  
Office of Environmental Planning  
District 7

File No: 07-LA-210 (KP 30.3/40.2)  
Upgrade Traffic  
Operations System  
EA: 129971  
CE # 200010017

Subject: **Environmental Requirements for CE**

The following requirements need to be met in order for the attached CE to be valid. If there is any change to the scope of this project, this office must be notified and further studies may be required.

### **Biology**

If any clearing, cutting or grubbing of trees or plants should be required for this job, this office must be notified two months in advance of any such work to arrange pre-construction biological surveys. If tree removal or trimming will take place, it should be scheduled to occur between September 1 and March 15 to avoid the nesting season. If trees must be trimmed and/or removed outside of this period, and nesting birds are present, coordination with the California Department of Fish and Game will be required to determine the appropriate course of action.

### **Hazardous Waste**

A Hazardous Waste Site Investigation (SI) and any recommended remediation must be completed prior to any construction activities.

### **Cultural Resources**

In the event that archaeological or historical materials are encountered during construction, all construction activities placing resources at risk must cease. This office will need to be contacted immediately and work cannot resume until approval is granted from the appropriate official.

Please contact Che McFarlin at (213) 897-2936 with any questions.

## Memorandum

To : Jacqueline Tan  
Office of ITS Development

Attn: Ed Krause

Date: September 14, 2000

File: LA-210, KP 30.3/40.2  
Upgrade Traffic Operations System  
7-388 - 129971


George T. Ghebranious  
From: **DEPARTMENT OF TRANSPORTATION**  
Hazardous Waste Unit

Subject: Hazardous Waste Assessment

This is response to your request for a hazardous waste assessment for inclusion in a project report. The work consist of installing communication conduit in the freeway shoulder, placing pile foundations and installing turnout for the maintenance access from the freeway. Based on the available information, our assessment are as follows:

The potential for aerially deposited lead appears to exist along the unpaved shoulders. A Site Investigation (SI) will have to be performed to determine the extent of possible contamination. The completed SI Report will indicate if special provisions are required for handling and disposal/reuse of soil. The study will commence upon receipt of the request from your office and will take a minimum of 90 days to obtain the final results. Request for the study should be prior to the PS&E district circulation.

If you have any questions or require additional information, please call June Obayashi at Ext. 7-3808.

  
George T. Ghebranious  
Hazardous Waste Coordinator  
North Region

## Mitigation and Compliance Cost Estimate

Dist.-Co.-Rte.-KP: 07-LA-210 KP 30.3/40.2

EA: 129971

**Project Description:** Upgrading the Traffic Operations System (TOS) along I-210 from SR 2 to SR 134 by installing fiber optic trunklines, closed circuit television cameras, ramp metering systems, traffic monitoring stations, and a changeable message sign

**Person completing form/Dist. Branch:** Che McFarlin/OEP

**Project Manager:**

**Phone number:** 7-2936

**Date:** October 12, 2000

	Mitigation			Compliance
	Project Feature <sup>1</sup>	Environmental Obligation <sup>2</sup>	Statutory Requirement <sup>3</sup>	Permit & Agreement <sup>4</sup>
Fish & Game 1601 Agreement	0	0	0	0
Coastal Development Permit	0	0	0	0
State Lands Agreement	0	0	0	0
NPDES Permit	0	0	0	0
COE 404 Permit- Nationwide	0	0	0	0
COE 404 Permit- Individual	0	0	0	0
COE Section 10 Permit	0	0	0	0
COE Section 9 Permit	0	0	0	0
Other:	0	0	0	0
Noise attenuation	0	0	0	0
Special landscaping	0	0	0	0
Archaeological	0	0	0	0
Biological	0	0	0	0
Historical	0	0	0	0
Scenic resources	0	0	0	0
Wetland/riparian	0	0	0	0
Other:	0	0	0	0
<b>TOTAL (Enter zeros if no cost)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

- Costs are to be reported in \$1,000's.
- Costs are to include all costs to complete the commitment including: capital outlay and staff support; cost of right-of-way or easements; long-term monitoring and reporting, and; any follow-up maintenance.
- After approval by the Project Manager **a copy of the completed form is to be included in the PR/PSSR and a copy sent to Headquarters Environmental Program, attention: John Hebner.**

<sup>1</sup> Mitigation Caltrans would normally do if not required by a permit or environmental agreement.

<sup>2</sup> Mitigation Caltrans would not normally do but is required by conditions of a permit or environmental agreement.

<sup>3</sup> Mitigation Caltrans would not normally do and is not required by a permit or Environmental. agreement but is required by a law.

<sup>4</sup> Non-mitigation Caltrans would not normally do but is required by conditions of a permit or agreement.

CM



## PROJECT REPORT

### APPROVED BY:

C.J. O'CONNELL  
District Division Chief  
Division of Operations

5/14/95

Date

7-LA-2 14.5/24.6  
Route 5 to Route 210

7-LA-14 R24.7/R74.2  
Route 5 to Route 48 (Avenue D)

7-LA-30 R0.0/R2.7  
Route 210 to Route 66 (Foothill Blvd.)

7-LA-47/103 R0.0/4.6 & 0.0/1.6  
From Route 110 to Willow Street

7-LA-60 R25.4/R30.5  
Route 57 North to San Bernardino  
County Line

7-LA-71 R0.33/4.8  
From Route 10 to San Bernardino  
County Line

7-LA-134 0.0/R13.4  
Route 101 to Route 210

7-LA-210 R0.0/R48.6  
Route 5 to Route 10

ELA, NHD, SGV, NWK, LAX  
Communication Hubs

CCTV, CMS, HAR, RMS, TMS, AVC,  
VSAT Satellite Hub, FSE and  
Communication System

District 7 TMC

07393-129900  
HB4N  
TOS #4  
T-6378

Category 242

### APPROVAL RECOMMENDED BY:

GREGORY B. DAMICO, P.E.  
Project Manager  
Office of IVHS Development

4-20-95

Date

### CONCURRED BY:

PATRICIA P. PEROVICH, P.E.  
Chief, Office of IVHS Development

Date

## **I. INTRODUCTION**

It is proposed to construct a Traffic Operation System (TOS) supported by a communications system comprised of an optical fiber cable based Wide Area Network (WAN) and a VSAT (Very Small Aperture Terminal) satellite based WAN that will accommodate the voice, data, and video requirements for a complete Advanced Traffic Management System (ATMS) within District 7. The ATMS elements include Closed Circuit Television (CCTV) cameras, Changeable Message Signs (CMS), Highway Advisory Radio (HAR) stations, Ramp Metering Stations (RMS), Traffic Monitoring Stations (TMS), and Automatic Vehicle Classification (AVC) stations. The communication system will also support communication with such elements as automatic irrigation control systems, pump and tunnel Supervisory Control and Data Acquisition (SCADA) systems, signal controllers, Weigh-in-Motion (WIM) stations, and automated weather stations (AWS). The communication system will also be able to accommodate communication services for a Toll Plaza. This project will accommodate a future expanded Intelligent Transportation System (ITS) for District 7. The proposal calls for construction along Route 2 from Route 5 to Route 210; Route 14 from Route 5 to Route 48 (Avenue D); Route 30 from Route 210 to Route 66 (Foothill Boulevard); Route 47/103 from Route 110 to Willow Street; Route 60 from Route 57 North to San Bernardino County Line; Route 71 from Route 10 to San Bernardino County Line; Route 134 from Route 101 to Route 210; and Route 210 from Route 5 to Route 10 (refer to Exhibit 1). Cost for this project is estimated at \$49.87 million to be funded from various programs in fiscal years 1996/97 through 2000/01.

## **II. PROJECT CATEGORY**

This is a Category 5 project. On the basis of the definition in Section 2-5.2 (5) of the Project Development Procedures Manual (PDPM) and the finding of the Office of Environmental Planning, this project is categorically exempt under Class 1 of Caltrans environmental regulations.

## **III. BACKGROUND**

This project is the fourth in a series of traffic operational system projects being implemented to provide Caltrans District 7 the ability to manage traffic operations throughout the Los Angeles area. The following discussion presents background information for the freeway facilities included in this TOS project.

Route 2 (Glendale Freeway) is an eight lane facility originating just north of downtown Los Angeles and terminating at Route 210 in La Canada. The Glendale Freeway serves as a primary commuter route for vehicles traveling between downtown Los Angeles and the northern portion of the San Fernando Valley. The above commuting patterns result in traffic congestion southbound in the AM peak hour and northbound in the PM peak hour.

# R/W DATA SHEET FOR PR SCOPING REPORT

WBS 150.15.05

TO: ED KRAUSE

ATTN:

PHONE 7

PLEASE INITIAL	DATE
(1) SENIOR R/W P&M	
(2) CAPITAL COORDINATOR-RM 303	
(3) PROJECT FILE ARCHIVE COORD-RM 306	
(4) PROD.COORDINATOR	

REVISED

UPDATED

DATE: 6/6/01

ROUTE: Ia 210

PM/KM 31/40-

E.A: 129971

ALT:

PROJ. DESC: tos install

**IF THIS E.A. IS CHANGED OR SPLIT INTO ANOTHER E.A., OR THE PROJECT SCOPE, SCHEDULING, OR VALUE  
SUFFICIENTLY CHANGE THEN THIS DATA SHEET IS INVALID AND A NEW OR UPDATED DATA SHEET WILL BE REQUIRED.**

TRANSMITTED HERewith IS A COST ESTIMATE PURSUANT TO THE FOLLOWING CONDITION(S)

- ☒ 1- COST ESTIMATE IS VALID FOR THE ABOVE SCOPING REPORT ONLY.  
THIS IS AN ESTIMATE ONLY AND NOT AN APPRAISAL. IT MAY BE BASED ON A WORSE CASE SCENARIOS.  
THE ESTIMATE IS SUBJECT TO CHANGE AND REVISION
- ☒ 2 NOTIFY THE ABOVE COORDINATORS IF THIS IS THE PREFERRED PROJECT
- ☐ 3- RESIDENTIAL DISPLACEMENT IS INVOLVED AND ENVIRONMENTAL DEPT. NEEDS TO BE ADVISED BY YOUR DEPT.
- ☒ 4 -MAPS WERE : PROVIDED ☒ NOT PROVIDED ☐  
DATE
- ☒ 5- THE MAPPING DID NOT PROVIDE SUFFICIENT NOR ADEQUATE DETAIL TO DETERMINE THE LIMITS OF  
THE RIGHT OF WAY REQUIRED AND EFFECTS ON THE IMPROVEMENTS.
- ☒ 6- THE TRANSPORTATION FACILITIES HAVE NOT BEEN SUFFICIENTLY DESIGNED SO OUR ESTIMATOR  
COULD DETERMINE THE DAMAGES TO ANY OF THE REMAINDER PARCELS AFFECTED BY THE PROJECT.
- ☒ 7- ADDITIONAL RIGHT OF WAY REQUIREMENTS ARE ANTICIPATED BUT ARE NOT DEFINED DUE TO THE  
PRELIMINARY NATURE OF EARLY DESIGN REQUIREMENTS.
- ☒ 8- TIME CONSTRAINTS PRECLUDED A DETAILED COST ESTIMATES
- ☒ 9- TIME SCHEDULE PROVIDED BY REQUESTING PARTY DID NOT PERMIT TIME FOR A FIELD INSPECTION
- ☒ 10- OTHER (EXPLAIN):

11	CURRENT VALUE (FUTURE USE + CONTIN. RATE)	NO NEW R/W IS REQUIRED INCLUDING FEE, PERM. EASEMENT! AND TEMP. EASE. PER J. TAN	ESCALATED VALUE
A-R/W ACQ. (INCL. CONTINGENCY G.W.-CONDEM.-ADM. S.T.L.) PERMITS VARIOUS PERMITS	NONE	<b>PROVIDED BY R/W ESTIMATOR</b>	NONE
B-CLEARANCE /DEMOLITION-C.R.	NONE		NONE
C-RAP. (CONT. RATE.)	NONE		NONE
D-ESCROW COSTS (CONT. RATE.)	NONE		NONE
E-UTILITY RELOCATION COSTS	\$20,000	<b>PROVIDED BY R/W UTILITY DEPT</b>	\$21,400
TOTAL ESTIMATED COST (CURRENT VALUE-FUTURE USE)	\$20,000		TOTAL ESCALATION
12-CONSTRUCTION CONTRACT WORK	NOT KNOW AT THISTIME		NOT KNOW AT THISTIME
(13)-ESCALATION RATE R/W 7%	(15)-CERT. DATE: 10/01/01	(16) YEARS TO CERT.	0.33
(14)-ESCALATION RATE UTILITIES 7%			

17-GENERAL DESCRIPTION OF RIGHT OF WAY: SEE PAGE 2- DESCRIPTION OF R/W-SEE GRID R/W INVOLVED ☐ NO R/W ☒

18-RELOCATION DISPLACEMENT (RAP FROM EWS) YES ☐ NO ☒

19-ARE UTILITY FACILITIES OR UTIL. RIGHT OF WAYS AFFECTED (see utility attachment)  
(20)-DESCRIBE SEE ATTACHED UTILITY SHEET- PAGE 3 OF 4 YES ☒ NO ☐

21-ARE RAILROADS FACILITIES OR R.R. R/W AFFECTED (SEE R.R. ATTACHMENT)  
(21a) DESCRIBE: SEE ATTACHED R.R. SHEET -PAGE 4 OF 4 YES ☐ NO ☐

22-ARE HAZARDOUS WASTE AND /OR MATERIAL FOUND: YES ☐ NONE ☐ EVIDENT ☒ Potential  
haz. waste  
on parcels

23-ARE EXISTING OR POTENTIAL AIR SPACE PARCELS AFFECTED YES ☐ NO ☒

24-IS IT ANTICIPATED THAT ALL RIGHT OF WAY WORK WILL BE PERFORMED BY C/T STAFF YES ☒ NO ☐

25- DO YOU ANTICIPATE ANY MAJOR ITEMS OF CONSTRUCTION CONTRACT WORK NOT KNOW  
AT THIS TIME ☒ YES ☐ NO ☐

26-ARE THERE ANY MATERIAL BORROW AND/ OR DISPOSAL SITES REQUIRED NOT KNOW  
AT THIS TIME ☒ YES ☐ NO ☐

27-ARE THERE POTENTIAL RELINQUISHMENT AND /OR ABANDONMENTS NOT KNOW  
AT THIS TIME ☒ YES ☐ NO ☐



11/8/99

AA

# UTILITY INFORMATION AND ESTIMATED COST REQUEST

TO: NORM JUAREZ-UTILITY COORDINATOR Room 334 # 7-1920  
TO: UGO ANAKWENZE-UTILITY ENGINEER

DATE: 5/30/01  
ROUTE: Ia 210  
P.M. 31/40--  
E.A.: 129971  
ALT:  
DESC: tos install  
CONTACT ED KRAUSE  
PHONE

PLEASE PROVIDE THE NECESSARY UTILITY COST AND DATA REQUIRED TO  
COMPLETE THE UTILITY SHEET BELOW. THIS DATA WILL BE USED IN THE DATA SHEET.  
PLEASE PROVIDE THIS INFORMATION WITHIN THE NEXT TWO WEEKS.  
ATTACHED ARE THE FOLLOWING DOCUMENTS

1-MAPS x 2-REPORTS  
TOM MCVARISH  
PLANNING AND MANAGEMENT.

**PLEASE COMPLETE PER UTILITY MANUAL- PAGE 1 EX 136**

## UTILITY INFORMATION FOR R/W DATA SHEETS

1-ARE UTILITIES OR R/W IMPACTED AND AFFECTED: YES X NO

### PLEASE LIST WHAT UTILITIES ARE AFFECTED :

- 1 20IN CONC STL CITY OF PASE. WTR
- 2 6IN MSCGAS AT HOWARD
- 3
- 4
- 5

- 6
- 7
- 8
- 9
- 10

PREPARED BY  
P.YEGANE

DATE

2-TYPES OF FACILITIES AND AGREEMENTS REQUIRED: REQUIRED NONE  
DESCRIBE  
DESCRIBE  
DESCRIBE

3-ARE UTILITY EASEMENTS REQUIRED YES NO HOW MANY

4-TOTAL ESTIMATED COST OF STATE'S OBLIGATION FOR UTILITY RELOCATION : CURRENT COST \$ \$20,000

### 5-UTILITIES: 5A AND 5B

PLEASE COMPLETE		
TYPE	5A- NO. OF UNITS	5B- PY'S
U4-1-	2	0.0512
U4-2-		
U4-3-		
U4-4-		
U5-7		
U5-8		
U5-9-	3	0.0819
TOTAL		0.1331

6-UTILITY ESCALATION RATE:

7-ESCALATED VALUE TO  
UTILITY CONSTRUCTION  
COMPLETION DATE \$21,400

PREPARED BY

DISTRICT UTILITY COORDINATOR N.JUAREZ DATE 6/6/01

**RETURN TO MCVARISH**